

# **THE EUROPEAN PLATFORM ON PREPAREDNESS FOR NUCLEAR AND RADIOLOGICAL EMERGENCY RESPONSE AND RECOVERY (NERIS)**

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In recent years, major improvements have been made internationally (i.e. within IAEA and OECD/NEA programmes) and in Europe (i.e. within the Euratom Framework programmes) in the field of nuclear emergency and post-accident preparedness and management. This notably includes advances in decision support tools and improved methods for information and data exchange. Moreover, participative governance through the setting up of local-national cooperation processes has been initiated in several countries to favour partnership working between local stakeholders and national and international experts in the development and support of local and regional activities.

Organisations that participated in the European integrated research project EURANOS (2004-2009) decided, at the end of the activity, to create a unique European Platform on nuclear and radiological emergency response and recovery combining researchers, operational communities and relevant stakeholders. The so-called NERIS Platform has the following objectives:

- Improving the effectiveness of current European, national and local approaches for preparedness concerning nuclear or radiological emergency response and recovery.
- Promoting more coherent approaches in preparedness for nuclear or radiological emergency response and recovery throughout Europe through the establishment of networking activities.
- Maintaining and improving know-how and technical expertise in preparedness for nuclear or radiological emergency response and recovery among all interested stakeholders in Europe by developing a supranational training programme.
- Identifying needs for further developments and addressing new and emerging challenges in the field of preparedness for nuclear and radiological emergency response and recovery.

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To date, 36 organisations from 20 countries have already joined the Platform which comprises national and local authorities, technical support organisations, professional organisations, research institutes, universities and non-governmental organisations.

The NERIS Platform is operated by a management board that defines the work programme and a secretariat in charge of the technical administration of the Platform including the management of the NERIS website - [www.eu-neris.net](http://www.eu-neris.net) - and the publication of two 'NERIS Newsletters' per year. An R&D Committee will elaborate the strategic orientation of the Platform based on the new areas of interest identified by the Working Groups and the expectations and demands of the Partners. The Platform members meet once a year on the occasion of the General Assembly.

The first General Assembly of the Platform was organised in June 2010 during the third European IRPA Congress in Helsinki to launch the NERIS Platform activities. The second General Assembly took place in May 2011 in Paris to review the initial results of the Platform's activities, elect new members to the Management Board and to discuss the long-term future of the Platform.

Following the first NERIS General Assembly, two working groups were created:

- A Working Group on « the practical implementation of the ICRP recommendations ».
- A Working Group on « processes and tools for emergency and rehabilitation preparedness at community level ».

New Working Groups on specific topics could be created in the future should there be sufficient interest.

The first working group on « the practical implementation of the ICRP recommendations » aims to explore the implications of these recommendations and how they can be adopted into national legislation. The group will also develop guidance on how to adapt existing Decision Support Systems to the new approach proposed by ICRP. The first meeting of this Working Group took place in November 2010 in France. 21 participants from 15 different countries discussed how the ICRP 103, ICRP 109 and ICRP 111 recommendations could be implemented into national emergency management procedures and regulations. It was concluded, that in most European countries the implementation has not started, although first attempts have been made to investigate the consequences for national regulations. The group also agreed on modifications that might be required to computer programs to simulate (a) all exposure pathways for the calculation of the residual dose in a given time period and (b) the impact of early and late phase countermeasures. It was agreed that the dose from consumption of contaminated food might be estimated in a simplistic way because restrictions on contaminated food would always be applied following a

nuclear accident. It was recognised that the simulation tools should also contain a component to define and evaluate various scenarios to support emergency preparedness. In conclusion, the Working Group supported the idea of organising an international workshop in February 2012 on « the practical implementation of the ICRP recommendations » The Workshop will provide a forum for the discussion and sharing of experiences on the implementation of ICRP Recommendations and for exploring the methodological and computational aspects related to the practical introduction of these recommendations in existing decision support tools used in European Countries.

The objective of the second Working Group on « processes and tools for emergency and rehabilitation preparedness at community level » is to exchange experiences on local-national cooperation and stakeholder engagement in developing emergency and recovery strategies. The Group also aims to adapt or develop user-friendly processes and tools to assist communities in preparing for local cooperation, to test them in national or international exercises and to organize seminars on lessons learnt. The first meeting of the Working Group took place on November 2010 in France. 26 participants from 13 different countries discussed existing preparedness experiences with local communities in their respective countries as well as the topics of interest for these local communities in the future (e.g. management of water resources, agricultural and industrial areas, information and communication strategies). These experiences were presented through 3 phases: crisis management, end of the emergency and the transition phase; and the long-term. It included for example the presentation of a Nordic workshop (FOOD) on late phase countermeasures and safe food production in nuclear and radiological emergencies organised by NRPA in Norway, the French CODIRPA experience led by ASN in France that address the post accident phase management issues, and the organisation by VUJE of workshops and training courses with stakeholders in the Slovak Republic. The meeting also provided a good opportunity for the participants to share their views concerning the future of the Working Group. Notably, it was agreed to design a template to collect information on the different initiatives, experiences and tools in a standardised format. Concerning the next Working Group meetings, specific topics will be addressed to further discuss the issues at stake at the community level.

The NERIS Platform also supports the organisation of training courses. The next editions of these courses have been scheduled as follows:

- The training course on "Preparedness and Response for Nuclear or Radiological Emergencies" organised by SCK·CEN, will take place on 17-21 October, 2011 in Mol, Belgium. The main objective of the training course is to provide fundamental knowledge and practical advice to all those involved in emergency planning and response. The course offers a comprehensive overview of nuclear and radiological emergency management in Europe. This includes, but is not limited to, principles of intervention; radiological evaluations;

decision-support tools; different aspects of planning and organisation in off-site emergency response; economic, social and psychological impacts.

- The training course on “Preparedness for Nuclear and Radiological Post-Accident Rehabilitation” organised by CEPN, will take place in 2012 in Fontenay-aux-Roses, France. This training course deals with the post-accidental period, i.e. weeks, months and years that follow a nuclear accident or a radiological event. The main objective of the course is to provide fundamental knowledge and practical advice for those interested in the rehabilitation of living conditions in contaminated territories following a nuclear accident or a radiological emergency with long-term consequences for the population.

In the context of the 7<sup>th</sup> Euratom Research Framework Programme, a research project has been launched in February 2011 on “Preparedness for Nuclear and Radiological Emergency Response and Recovery”. This 3 year research project, called NERIS-TP, is involving 19 organisations from 13 countries and is co-ordinated by the Karlsruhe Institute of Technology (KIT). The objectives of the project are firstly to solve urgent research needs such as the implementation of the new ICRP recommendations in the simulation models, the coupling of decision support systems such as ARGOS and RODOS to early notification systems and to carry out research activities to improve emergency management on the local and the national level, and secondly to support the operation of the NERIS Platform in order to make it sustainable in the long term.